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Washington, D.C. 20003 January 14, 1983

Director of Central Intelligence Washington, D.C. 20505

Dear Sir:

This is a request under the Freedom of Information Act, 5 U.S.C. §552, as amended. The January 10, 1983 edition of Aviation Week & Space Technology magazine reported that Rear Admiral Edward A. Burkhalter, director of the Intelligence Community Staff, recently addressed a meeting of the Armed Forces Communications and Electronics Association. The article quoted Admiral Burkhalter as telling those in attendance that "one of the means by which the Soviets have acquired valuable information in recent years has been through adroit use of the Freedom of Information Act."

I have enclosed a copy of the article for your information. I am writing to request that I be permitted to inspect and copy any and all FOIA requests made by the Soviets. In addition to the requests themselves, I am seeking access to all records relating to those requests, as well as the records obtained by the Soviets through the FOIA. Unless Admiral Burkhalter intended another meaning, I am using the term "Soviets" to include individuals, governments, or surrogates acting on behalf of the government of the U.S.S.R.

In the event that you determine that the requested records, or any portion of them, are exempt from disclosure, I ask that you cite me to the specific exemption of the Act upon which you are relying. As required by the Act, I will expect your determination within ten working days. Thank you for your courtesy.

Sincerely,

Paul M. Rosa

PMR:mw

EXEC REG

British Design Mach 2 VTOL Fighter

London—British Aerospace has designed an advanced, Mach 2 supersonic vertical takeoff and landing fighter aircraft, designated the P. 1216, and has completed a full-scale mockup at its Kingston production facility.

Decision to build a mockup was made after extensive wind-tunnel testing by the company's Kingston-Brough Div. Wind tunnel tests on the model and several other configurations have been under way for several years (AW&ST Dec. 8, 1980, p. 51).

The P. 1216 design is powered by an uprated Rolls-Royce Pegasus engine, rated at more than 30,000 ib. and employing plenum-chamber burning in the two forward ducts for added thrust. The engine has a single rear vectorable duct through which the engine's hot section exhausts, rather than two rear ducts as in the existing Harrier family.

The P.1216 is larger than current AV-8B aircraft. A new wing has been designed for the Mach 2 role.

developed and manufactured in that nation.

The Lavi, the team said, would not compete with the new U. S. advanced tactical fighter, adding that the first prototype Lavi will not be available until November, 1985, with first production aircraft scheduled for delivery in 1990. Israel plans to buy the first 300 aircraft for its inventory and could not begin export sales of the Lavi until 1995, according to Defense Dept. officials...

There is a debate within the Administration on whether to allow Foreign Military Sales credits to be used for Lavi development. There is no real problem with using the credits for fighter production, only for development, one Defense Dept. official explained. He said, however,

it is likely Foreign Military Sales funding will be used for the development program.

Funding for the Lavi is less certain than release of component composite technology and will depend on the meeting scheduled in February between President Reagan and Israel's prime minister, Menachim Begin, and the position Israel takes on West Bank settlements.

A licensed production contract for the PW1120 engine has been signed, and the engines for the Lavi will be produced at Bet Shemesh Engines, Ltd., near Tel Aviv. The PW1120 will share a common core with the F100-PW100/200 engines and have 60% commanality in parts. No change is expected in hot-section life for the engine.

The PW1120 is being developed with

improved operational capability, especially at low-speed and high-altitude regimes No change is expected in distortion handling, and a 12% lower fuel consumption is anticipated in aerial combat.

The State Dept. has delayed transfer of composite materials technology to Israe from three major U. S. companies—Grumman Aerospace Corp., Vought Corp. and General Dynamics—for the Lavi, but that restriction may be lifted in the next few weeks (AW&ST Sept. 13, 1982 p. 31).

There are still interagency difference within the Administration over the devel opment of the aircraft, but there also is a consensus that the composite technolog will be permitted, with contracts for the structure development.

The wing and vertical tail for the Lat would be codeveloped by subcontracting to the three U.S. companies by Israe Aircraft Industries for composite structures. Composite technology also will be applied to the all-moving canard and control surfaces and to structural doors, panels and air brakes. This composite material application is expected to yield advantages in reduced assembly work lower operating costs, higher structural difficiency and higher design flexibility.

Israel expects to codesign and copmeduce the Lavi fighter in Israel and halloted \$100 million to codesign and adapthe PW1120 engine to it, with an additional \$300 million budgeted for engine production in that country. Other codew

Measures Urged to Stem Tide Of Sensitive Data to Soviets

San Francisco—U. S. should sanction the wider use of lie detector tests by the Defense Dept. and revise both the Freedom of Information Act and its procedures for declassifying defense-related material to stem the flow of sensitive technological information to the USSR, an intelligence official said here last week.

One of the means by which the Soviets have acquired valuable information in recent years has been through adroit use of the Freedom of Information Act, according to Rear Adm. Edward A. Burkhalter, U. S. Navy, director of the Intelligence Community Staff.

"Just by asking the right questions, the Soviets are able to pull from federal government files reams of technical data not otherwise available to the public, much of it only recently declassified," he said at an Armed Forces Communications and Electronics Association meeting (AFCEA).

Industry, rather than government, however, is the front line in the struggle against Soviet industrial espionage. Industry must exercise its responsibility to help deny sensitive tech-

nology to the USSR and other Eastern bloc nations, Burkhalter said.

No high-technology company is free from the threat of Soviet infiltration or theft, but the many small companies developing emerging technologies, whose applications are only now being explored, are vulnerable. Because the applications are still indefinite, this work is not subject to security classification and protection.

The Soviet appetite for U. S. technology is not indiscriminate, Burkhalter said. Rather, at the highest level of government, the Soviet State Committee for Science and Technology considers the needs of the Soviet military and, to a lesser extent, the civilian scientific and industrial communities and formulates these needs into acquisition requirements.

About 30% of these requirements can be met by such legal, open means as subscribing to such periodicals as AVIATION WEEK & SPACE TECHNOLOGY, Burkhalter said, or by attending international conferences, sending scientists to do research at U. S. universities, or buying equipment that is available for unrestricted

international sale. For the 70% of its ted ogy acquisition requirements that it can obtain legally and openly, the community turns to the Soviet intelligence services KGB and the military intelligence unit GRU. Former KGB officers and agents in the West have said that this technology a sition has been assigned the highest profor KGB and GRU collection, and the services compete strenuously for the rection that follows success in acquiring a value technology, Burkhalter said.

Open and covert acquisition of We technology saves the Soviets billions of lars in research and development costs years in research and development? Burkhalter set the value of the inform that the Soviets obtained over a three period from one source, former Hughe craft radar engineer William Holden Be hundreds of millions of dollars (AWAST 10, 1982, p. 24; July 6, 1981, p. 25).

He said Bell was paid \$110,000 force fied information about the USAF/McDa Dougla's F-15 look-down/shoot-down and Stealth radar, an all-weather radar, the Navy Hughes Phoenix materials Army/Raytheon Patriot and Improved missiles, and a towed-array submarines

"In cost versus benefit terms, the K

lopment and coproduction funding includes:

- Wing and vertical stabilizer—\$60 million and \$100 million, respectively.
- Flight control computer with Lear Siegler already under subcontract for \$60 million in codevelopment, and \$100 million planned for coproduction.
- Airframe systems with \$20 million and \$100 million for codevelopment and coproduction with U.S. industry.
- Materials procurement for coproduction estimated at \$500 million in Fiscal 1982 dollars.

The Lavi concept as presented by the Israeli briefing team is built around the use of proved materials and processes, adapting systems already developed whenever possible. This approach uses state-of-the-art technology and is low risk in approach. It also provides cost-effective qualification testing of the aircraft, Defense Dept. officials said.

The avionics system for the fighter is planned to operate with advanced digital systems with interactive multifunction display and controls, fire control integrated with internal and external sensors, and enhanced active and passive self-defensive contents.

Systems.

Computer embedded systems for the Lavi would be built to comply with U. S. military specifications. The flight control system for the aircraft would be a fly-by-wire system with relaxed static stability. It will have an analog but no mechanical backup system.

Boeing Power System

Los Angeles—Supplemental type certificate has been issued by the Federal Aviation Administration for an engine power trim system (EPTS) designed to adjust automatically Boeing 727 engine power during climb and cruise.

The EPTS is expected to reduce the transport's total fuel consumption by more than 2% by optimizing climb and cruise performance. The system also provides protection against engine overtemperature and excessive engine pressure ratios.

Garrett's AiResearch Manufacturing Co. and United Airlines will jointly hold the supplemental type certificate for the Boeing 727. AiResearch and several carriers are considering joint certification of the EPTS on other aircraft.

The avionics systems for the Lavi would involve a number of U.S. contractors. Israel has issued a request for proposal to Teledyne for the 1750A computer emulator system. Other avionics action by Israel includes:

- Wide-angle head-up display with a draft request for proposal issued to Hughes and Marconi for \$3 million for a development and procurement cost goal of \$100,000 per unit in production. The HUD would not be built in Israel.
- Software and support with partial delivery already accomplished by the Aero-

nautical Systems Div., Wright Patterson AFB.

- Programmable signal processor emulator by Westinghouse that is under study contract.
- Electronic countermeasures components by ITT in the detail design stage for tradeoff decisions.

In presenting its development plan to the Reagan Administration, Israel overcame doubts that the aircraft could be developed for \$1.3 billion by detailing the development costs. They are: airframe, \$453 million; engine, \$110 million—this is the cost to adapt the PW1120 to the Lavi; avionics, \$235 million; flight control and electromechanical systems, \$109 million; test and evaluation, \$200 million, and instrument landing system, \$53 million.

The development costs for these major systems total \$1.1 billion, with an additional \$210 million for production tooling—\$110 million for the airframe and \$100 million for the engine.

Israel's position on developing and producing the Lavi is that its industry has the basic infrastructure required to undertake the development of an advanced military aircraft. Israeli manufacturers operate in accordance with U.S. military standards and many are approved vendors for U.S. aircraft companies.

The Lavi program would provide a capacity for manufacturing and assembly of the airframe and engine to take up the slack in phasing out the Kfir program.

far and away the most efficient, economically productive element of the Soviet economy, because of its contribution in the foreign technology area," Burkhalter said.

The benefits to the Soviet Union do not stop there. "With our best technology in hand, they can develop countermeasures to our systems before we ever deploy them. And Soviet industrial espionage imposes new, ever-increasing costs as we struggle to overcome technology we have developed that is now in Soviet hands."

Soviet technological dependence on the West does not condemn them to permanent inferiority. The Soviets are able to learn more from our mistakes, select the best from both technological worlds, and focus their research and development capital on areas where we are weakest, he said.

Much is made at times of safeguards surrounding equipment that has civilian as well as military uses, but these have proved to be ineffectual, Burkhalter contended. He cited the case of two floating drydocks built in Japan for Soviet civilian use, but now supporting the Soviet Navy's Pacific and Northern fleets. They are being used to repair Kieviclass aircraft carriers, nuclear-powered ballistic missile submarines and other warships, and no doubt will be used for the new genera-

tion of Soviet aircraft carriers projected for the 1990s, the admiral said.

This diversion of ostensibly civilian hardware for military use should have come as no surprise, for the Soviet military has first choice of any new technology acquired in the West, he added. It is part of the system and not a surreptitious, backdoor arrangement.

The U. S. government has taken steps to counter Soviet industrial espionage, including the following, Burkhalter said:

- The Commerce Dept. has strengthened its Compliance Div., including the opening of new field offices in San Francisco and Los
- Angeles.

 The Customs Service in early 1982 began its Operation Exodus to detect and prevent illegal exports of technology. Although it already has produced a number of prosecutions, the program only now is moving into full
- operation.

 The U. S. Attorney General established a
 Critical Technologies Task Force in California
 to coordinate with state and local police and
 high-technology businesses in this area "to
 stem the hemorrhage of critical technology to
 our adversaries."
- The U.S. intelligence community is redoubling its efforts to learn what items are on the Soviet's shopping lists so that industry

and law enforcement agencies can take defensive measures.

- Counterintelligence efforts are being strengthened for better monitoring of Soviet and East European agents in the U. S., Western Europe and elsewhere. Burkhalter stressed the close relationship between the intelligence services of the USSR and its satellites. "They respond to Soviet collection tasking, and the USSR benefits from everything of value that they collect," he said. Bell, for example, was paid by Marian Zacharsky, West Coast manager of Polamco, an overt, legal, Polish machinery importing company.
- Intelligence is being passed to the Justice and Commerce departments, the FBI and other elements of the government to help them in their countermeasures.

In the policy area, the U.S. is working to strengthen CoCom, the Coordinating Committee for Multilateral Export Controls, and technology export restrictions are being updated. Additionally, the activities of Soviet and East European citizens in the U.S. are being restricted.

The Administration is asking Congress for modifications to the Freedom of Information Act to prevent the public release of sensitive technological information, especially that relating to U. S. weapons systems.